

HP BladeSystem p-Class Power Extension Kit

Installation Instructions



*Read instructions completely before beginning
installation procedures*

Overview

This document provides procedures for installing the HP BladeSystem p-Class Power Extension Kit option in an HP BladeSystem p-Class solution. In installations where two power enclosures are connected to mini bus bars by the HP BladeSystem p-Class Dual Power Input Kit for Mini Bus Bar option (available separately), this power extension kit option enables the second power enclosure to be placed above the server blade enclosures, rather than below them.

Kit contents

- DC power cables (2 red, 2 black)
- Data cable
- Junction boxes (2)
- Hardware kit
- This document

Installation requirements



WARNING: Power to all components must be off. Before beginning installation of this option, be sure that the power enclosure and hot-plug power supply LEDs are not illuminated.

Before installing the HP BladeSystem p-Class Power Extension Kit, be sure you have already installed the following components:

- 3U power enclosures
- Enhanced server blade enclosures
- Mini bus bars
- HP BladeSystem Dual Power Input Kit for Mini Bus Bars

Refer to the documentation that is included with the HP BladeSystem 3U Power Enclosure or to the *HP BladeSystem p-Class Enclosure Installation Guide* for additional information.

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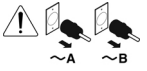
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Warnings and cautions



WARNING: This equipment must be installed by a licensed electrician or trained service personnel familiar with high-power circuitry.



These symbols, on power supplies or systems, indicate that the equipment is supplied by multiple sources of power.

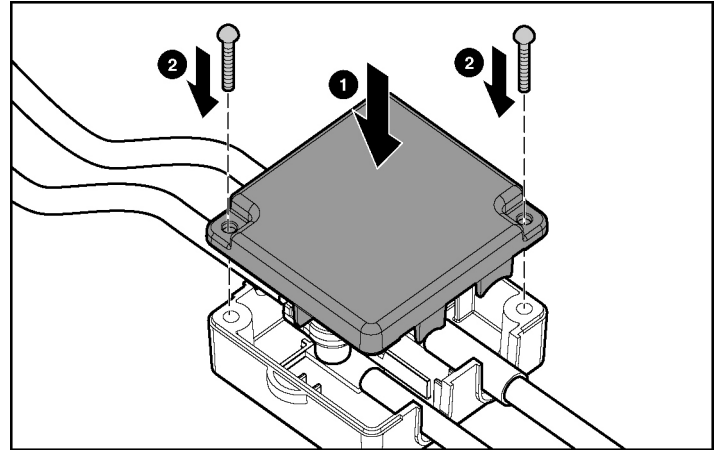
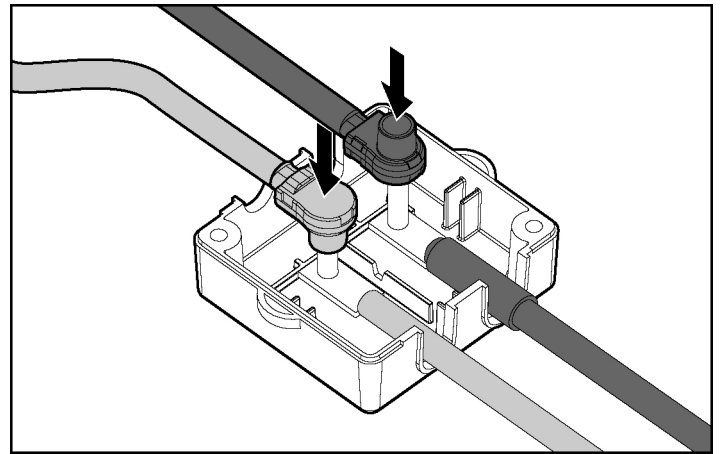
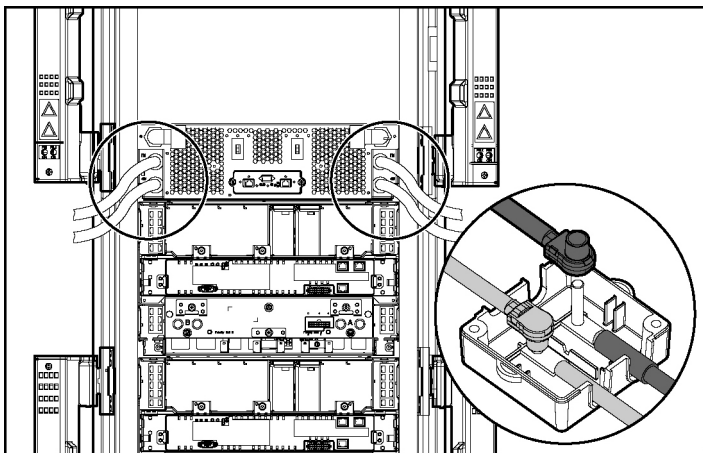
WARNING: To reduce the risk of injury from electric shock, remove all power cords to completely disconnect power from the system.

- Each power enclosure has two or more power supply cords. A single rack or cabinet may contain more than one power enclosure. Power may be supplied in a redundant fashion. Removing any single source of power does not necessarily remove power from any portion of the system. When performing any service other than hot-plug module replacement, you must completely disconnect all power to that portion of the system.
- When performing service procedures on server blade enclosures, ensure that both A and B DC power feeds are disconnected from the enclosure before servicing.
- When performing service procedures on power enclosures, shut off the circuit breakers to both A and B AC power feeds and then disconnect both power cords from the wall outlet before servicing.



CAUTION: Electrostatic discharge (ESD) can damage electronic components. Be sure that you are properly grounded (earthed) before beginning any installation procedure.

Connecting the DC power cables from the upper 3U power enclosure to the junction box



Repeat the steps for side B.

Mounting the junction boxes and routing the power cables

Secure the upper junction boxes into the rack so that they do not interfere with existing cables or the mini bus bars when the bus bars are closed and secured.

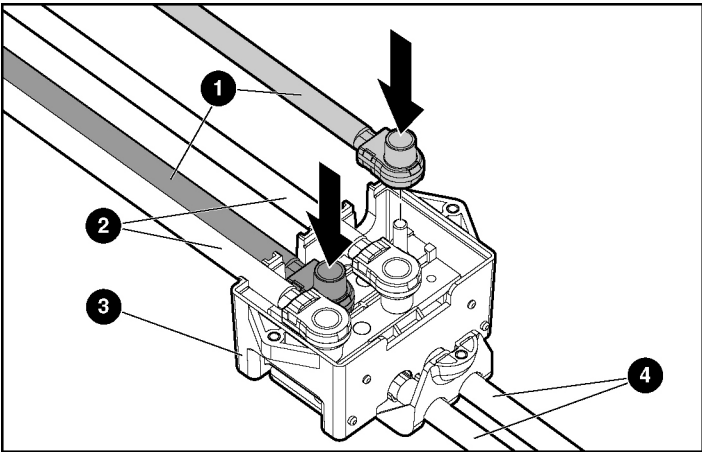
Route the free end of the power cables inside the rack between the rack and the rails. Be sure that the cables will not become trapped or damaged when the bus bars are opened or closed. Secure the cables to the rack with the cable ties supplied in the hardware kit.

Connecting the DC power cables from the lower 3U power enclosure to the dual power box

IMPORTANT: HP recommends installing the mini bus bar 3U up from the bottom of the rack to provide adequate space to mount the mini bus bar dual power boxes.

NOTE: Depending on the placement of the mini bus bar kit on the rack, it may not be possible to mount the dual power box as illustrated. Placement of the dual power box on the mini bus bar is optional when installing the HP BladeSystem p-Class Power Extension Kit.

Refer to the *HP BladeSystem p-Class Dual Power Input Kit Installation Instructions* and to the following figure and table to continue the installation.



Item	Description
1	DC power extension cables from upper 3U power enclosure
2	DC power cables from lower 3U power enclosure
3	Power cables to bus bar
4	Mini bus bar dual power box

After completing the dual power kit installation, complete the installation using the information below.

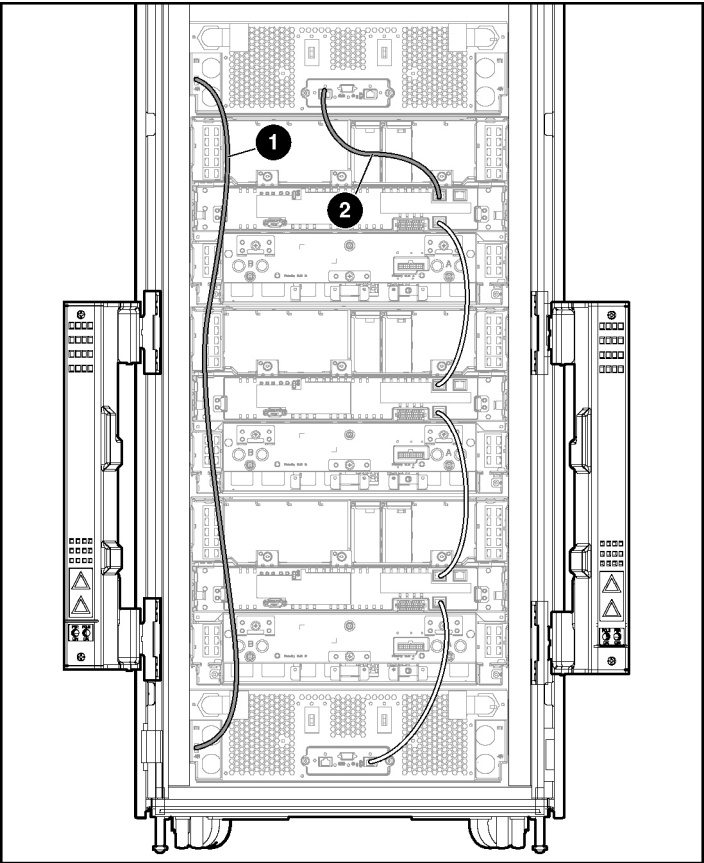
Connecting the management cables

NOTE: Previously installed components have been removed for clarity.

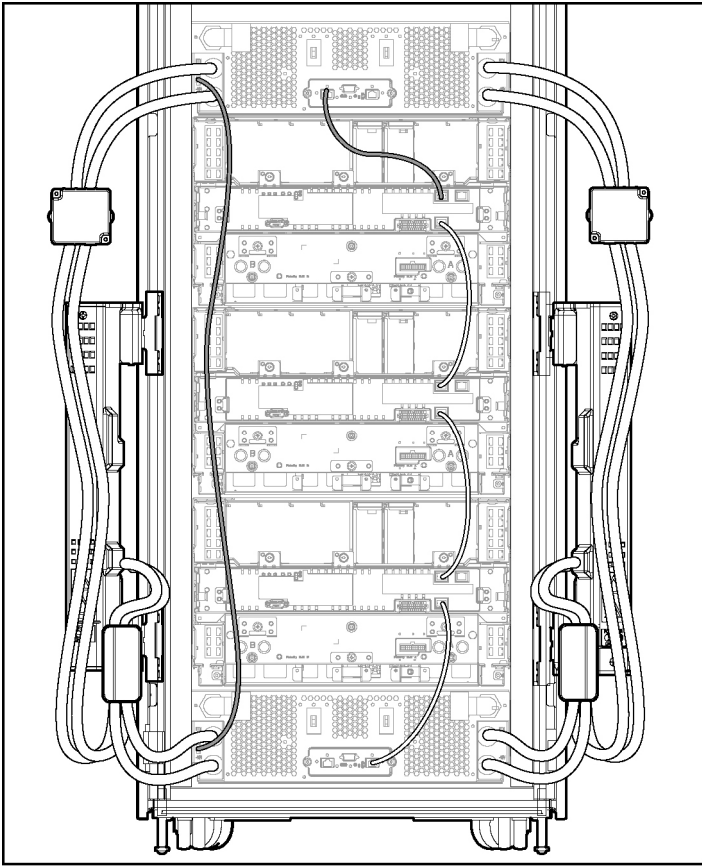
The load balancing cable enables load sharing between the two power enclosures. Connect the load balancing cable (1) from the lower 3U power enclosure to the upper 3U power enclosure.

Connect the management link cable (2) from the server blade enclosure to the upper 3U power enclosure.

NOTE: Management modules are used only for information management (asset tracking, for example). Disconnecting the management module cabling does not affect system operation.



Completing the installation



The installation is complete.